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09/885,681	06/20/2001	Roger Kahn	4033/2A	6364

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EXAMINER	
LU, KUEN S	
ART UNIT	**PAPER NUMBER**
2167	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/885,681	KAHN ET AL.	
	Examiner	Art Unit	
	Kuen S. Lu	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Applicant's Amendment of 12/29/2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.1. This action is responsive to Applicant's Amendment filed December 29, 2006.

1.2. Please note claims 1-27 in the application are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-27 have been fully considered. Applicant's argument concerning deficiency of Dan reference on teaching dependency records is persuasive. Examiner now introduces a new reference by Jammes to make up the deficiency in a new ground(s) of rejection as described below. The Examiner also follows new guidelines to address specification and abstract formalities and some potential U.S.C. § 101 issues.

Specification

3.1. The disclosure is objected to because of the following informalities:

At Page 10, Examiner doesn't understand "published files 106" at line 11 and "checking software 106" at line 10. It appears to be "published files 106" should be "published files 116" and treated as "published files 116". Appropriate correction is required.

Abstract

3.2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3.3. The abstract of the disclosure is objected to because it exceeds 150 words. The abstract also contains phrases that can be implied, such as "present invention" and "are also disclosed". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: date, time or time-stamp element in a comparing step for determining out of date content page as a result of changes made to the content.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.1. As set forth in MPEP 2106 (II) (A):

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional

descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application

5.2. As set forth in MPEP 2106 (IV) (B) (1):

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material." Abstract ideas, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

5.3. As set forth in MPEP 2106 (IV)(B)(1)(a):

Similarly, computer programs claimed as computer listings *per se, i.e.,* the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material *per se from claims* that define statutory inventions.

Products may be either machines, manufactures, or compositions of matter. *A machine is* "a concrete thing, consisting of parts or of certain devices and combinations of devices. *Burr v. Duryee. 68* U.S. (1 Wall.) *531, 570 (1863).* If a claim defines a useful machine or manufacture by identifying the physical structure of the machine or manufacture in terms of its hardware or hardware and software combination, it defines a statutory product. See, e.g., *Lowry, 32 F.3d* at *1583, 32* USPQ2d at *1034-35; Warmerdarn,* 33 F.3d at 1361-62, 31 USPQ2d at 1760.

Office personnel must treat each claim as a whole. The mere fact that a hardware element is recited in a claim does not necessarily limit the claim to a specific machine or manufacture. Cf. *In re Iwahashi, 888* F.2d 1370, 1374-75, 12 USPQ2d 1908, *191 1-*12 (Fed. Cir. 1989), cited with approval in *Alappat,* 33 F.3d at 1544 n.24, 31 USPQ2d at 1558 n_24.

5.4. Claims 1-27 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

As per claim 1, claimed subject matter is a system comprising a set of components: a template engine, a dependency record and dependency checking software. The components are software or data structure per se. Further, the system does not describe specific hardware to support determining out of date content page item as a result of changes made to the item in a data source. Please note the template engine is a software and executable, in light of specification.

Therefore, the claim lacks the necessary physical articles or objects to constitute a useful machine or a manufacture within the meaning of 35 USC § 101. They are clearly not a series of steps to be a process nor are they a combination of chemical compounds to be a composition of matter. They are, at best, functional descriptive material *per se*. As such, they fail to fall within a statutory category.

As per claims 2-14, each claim directly or indirectly depends upon claim 1, inherits the deficiency of being non-statutory from claim 1, and does not remedy the deficiency individually or by inheritance. The consequence is non-statutory.

As per claim 15, the claimed invention represents a method for determining out of date content page item as a result of changes made to the item in a data source. However, it is noted that the step, after a comparison step, for such determination is

intentional and the intentional step may not actually perform to produce concrete, tangible or useful results. The steps in the method is abstract because no concrete, useful or tangible result ensued for determining out of date content page item as a result of changes made to the item in a data source. However, a tangible, concrete and useful result is required in a practical application test. As such, they fail to fall within a statutory category.

As per claims 16-23, each claim directly or indirectly depends upon claim 15, inherits the deficiency of being non-statutory from claim 1, and does not remedy the deficiency individually or by inheritance. The consequence is non-statutory.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6.1. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernardo et al. (U.S. Patent 6,247,032) and further in view of Freivald et al. (U.S. Patent

6,012,087, hereafter "Freivald") and Jammes et al. (U.S. Patent 6,484,149, hereafter "Jammes").

As per claim 1, 15, 24 and 25, Bernardo teaches the following:

"a template engine for executing templates to generate a content page" (See col. 2, lines 56-62 where a tool is provided for facilitating the creation of Web pages with templates for predefined Web pages), and

"the template engine operative to generate a content page comprising content items selectively retrieved from a data source and arranged on the content page as defined by the template" (See col. 6, lines 4-8 where where templates comprise databases which may include fields, forms, views, texts and profiles and profiles may comprise fields).

Bernardo does not explicitly teach the content items retrieved and as arranged on the content page are such that "each content item in the data source being associated with time stamp information to indicate the last time the content item was modified".

However, Freivald teaches a dynamic web page with HTML header specifies the length of the page and the time/date when the web page was lastly modified (See Fig. 4 and col. 3, lines 16-25).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Freivald's teaching with Bernardo reference by enhancing Bernardo's Web page creating tool with functionality of recording timestamp when the content item was lastly modified because both references are directed to manging web page changes and the combined teaching of the two

references would have enabled Bernardo's system to apply Freivald's accurate detection and recording timestamp of change for further improving security features and facilitating web page creation.

The combined teaching of Freivald and Bernardo references does not explicitly teach "a dependency record for storing information regarding a relationship between content items that comprise the content page and the content items stored in the data source", although Freivald teaches stored "time parameter information associated with the content items that comprise the content page" in time/date data format of the time the web page was lastly modified (See Fig. 4 and col. 3, lines 16-25), as previously described.

However, Jammes teaches "a dependency record for storing information regarding a relationship between content items that comprise the content page and the content items stored in the data source" (See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Jammes' teaching with Freivald and Bernardo references by specifically implementing relational database table to store relationship information associating content page item and corresponding relational database data because the implementaion would have facilitated alteration of content data or content page format such that web pages could have been truly desinged and utilized in a manner of WYSIGWIG (What You See Is What You Get).

The combined teaching of Jammes, Freivald and Bernardo references further teaches the following:

"dependency checking software for comparing information contained in the dependency record with time stamp information contained in the data source for each content item that comprises the content page" (See Jammes: See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page, Freivald: Fig. 4, col. 3, lines 15-25 where timestamp of last modification is kept in page header),

"determining through the comparison those content pages that contain content items that have been modified in the data source" (See Freivald: Fig. 8B and col. 9, line 61 – col. 10, line 2 where timestamp in page header from document and database are compared to determine indication of changes) and

"instructing the template engine to re-generate a content page that contains modified content items" (See Jammes: See Fig. 19 and col. 47, lines 6-67 and col. 48, lines 1-25 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page and content pages are regnertaed based on current product information and user access, and Bernardco: col. 6, lines 4-8 where where templates comprise databases which may include fields, forms, views, texts and profiles and profiles may comprise fields).

As per claim 2, Jammes further teaches "a plurality of dependency records are used to store the relationship between the content items that comprises the content page and

the content items stored in the data source" (See Jammes: See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page).

As per claims 3 and 21, Bernardo teaches "the content page generated by the template engine comprises markup code" (See col. 6, lines 10-13 where HTML formatting components for Web page in the template is included).

As per claims 4 and 22, Bernardo teaches "the markup code is HTML" (See col. 6, lines 10-13 where HTML formatting components for Web page in the template is included).

As per claims 5 and 23, Bernardo suggests teaching of "the markup code is XML" (See col. 2, lines 28-31 where language other than HTML is suggested for creating Web site).

As per claims 6 and 16, Jammes further teaches "the dependency record contains parameters comprising name/value pairs of the information that are passed to the template engine to generate the content page" (See Jammes: See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page and ID/60011, RelType/GROUP and RELID/P0121 are examples of name/value pairs).

As per claims 7 and 17, Jammes further teaches "the dependency record comprises the address within the data source of the content items that comprise the content page" (See Jammes: See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page, and ID values in relationships table provide pointer, an address, to content page and relational database table record).

As per claims 8 and 18, Freivald further teaches "the dependency record comprises queries executed by the template engine to retrieve content items from the data source" (See col. 14, lines 21-29 where document is feached and content header length is retrieved from the fetched document).

As per claims 9 and 19, Jammes further teaches "the dependency record comprises sub-template scripts used by the template engine to generate a content page" (See Jammes: See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page, and lines in templates text files are the sub-template scripts used by template engine to generate a content page).

As per claim 10, Freivlad further teaches "the dependency record comprises the time the content page was generated" (See Fig. 4 and col. 3, lines 15-25 where date/time of web page modification is record in the page).

As per claim 11, combined teaching of Jammes, Freivald and Bernardo references further teaches further teaches "the dependency record comprises the date the content page was generated" (See Jammes: See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page, and Freivlad: Fig. 4 and col. 3, lines 15-25 where date/time of web page modification is record in the page).

As per claim 12, the combined teaching of Jammes, Freivald and Bernardo references further teaches "content management software to manage content items and operative to issue instructions to the dependency checking software to regenerate a content page upon modification of a managed content item" (See Freivald: col. 3, line 64 – col. 4, line 7 where web page change is automatically detected, Jammes: See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page).

As per claim 13, the combined teaching of Jammes, Freivald and Bernardo references further teaches "the content management software operative to issue instructions to the dependency checking software to re-generate a content page upon

modification of a template" (See Freivald: col. 3, line 64 – col. 4, line 7 where web page change is automatically detected, Jammes: See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page for content to be generated).

As per claim 14, Jammes further teaches "one or more dependency records to store information regarding the relationship between a template and the content items that comprise the content page" (See Fig. 19 and col. 47, lines 6-67 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page for content to be generated).

As per claim 20, Jammes further teaches "publishing the content page generated by the template engine to a disk" (See Fig. 19 and col. 47, lines 6-67, col. 8, lines 20-33 and col. 48, lines 26-30 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page for content to be generated, web server provides disk storage for database and files, and created page is in a form of file before being transmitted).

As per claim 26 the combined teaching of Jammes, Freivald and Bernardo references further teaches "the dependency checking software provides for comparison of time parameter information associated with a respective content item that comprises the content page and time stamp information associated with a respective content item in

the data source" (Jammes: Fig. 9 and col. 47, lines 6-67, col. 8, lines 20-33 and col. 48, lines 26-30 where a relationships table is the dependency record storing RELID corresponding records in relational database and items in content page, and Freivald: Fig. 4 and col. 3, lines 15-25 where date/time of web page modification is record in the page).

As per claim 27, Freivald further teaches "the time parameter information comprises a template execution time or a file publication time" (See Fig. 4 and col. 3, lines 15-25 where date/time of web page modification is record in the page).

Conclusions

7.1. The prior art made of record

A. U.S. Patent 6,247,032

B. U.S. Patent 6,012,087

F. U.S. Patent 6,484,149

7.2. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

C. U.S. Patent 6,560,639

D. U.S. Patent 6,615,235

E. U.S. Patent 6,484,149

Contact information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-

4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-305-39000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 703-305-3900 (toll-free).

Kuen S. Lu

Patent Examiner

March 10, 2007